REMARKS

This amendment is responsive to the Office Action of February 18, 2009. Reconsideration and allowance of **claims 1-18** are requested.

The Office Action

Claim 11 was rejected under 35 U.S.C. 112, 2nd paragraph.

Claim 1-16 were rejected under 35 U.S.C. 102(a) over Marchitto (US 2002/0016533).

Background

The present application is directed to a spectroscopic analysis apparatus for analyzing objects such as the blood of a patient. The apparatus comprises an excitation system which sweeps an excitation beam across a target region. Scattered radiation is used to generate an image of the target region which image is analyzed to locate a blood vessel(s) or other region of interest. A control unit controls either the excitation system to excite only the region of interest or an analyzer to analyze only radiation that is scattered as the blood in the region of interest is excited.

35 U.S.C. 112

Claim 11 has been amended to address the Examiner's objections.

The References of Record

Marchitto et al. discloses various methods/systems of optical imaging of subsurface anatomical structures and biomolecules utilizing red and infrared radiant energy. The techniques used include pulsatile enhanced imaging, confocal enhanced imaging, Raman enhanced imaging, laser speckle enhanced imaging, multiphoton interaction enhanced imaging, optical coherence tomography enhanced imaging, time correlated single photon counting enhanced imaging, and polarization enhanced imaging.

The Claims Distinguish Patentably Over the References of Record

Claims 1-16 are not anticipated by Marchitto et al. These rejections are hereby *traversed.*

More specifically, regarding **claim 1**, Marchitto et al. does not disclose a beam separation unit which separates at least part of elastically scattered radiation from inelastically scattered radiation, said scattered radiation being generated by the excitation beam at the target region, a monitoring system which generates an image of the target region using the scattered radiation and defines a region of interest in said image, and a control unit which at least one of controls the excitation system such that only the defined region of interest of the target region is excited or controls the detection system such that only scattered radiation from the defined region of interest is detected.

The Examiner refers Applicant to Fig. 3 and paragraphs [0036-0037] which disclose the use a Raman spectroscopy to excite a sample and analyze scattered radiation emitted by the sample. The Raman scattered photons are then used to detect and discriminate blood from other tissues made of different biomolecules. Marchitto et al. discloses a controller and data collector used to build an image using the Raman scattered photons. Marchitto et al. does not disclose a monitoring system that generates an image of a target region and defines a region of interest in the target region image. Additionally, Marchitto et al. does not disclose a detection unit which detects scattered radiation from the region of interest and a control unit which controls the excitation system to excite only the region of interest.

Accordingly it is submitted that independent **claim 1** and **claims 2-10** dependent therefrom distinguish patentable over the references of record.

Claim 11 calls for at least one of (a) controlling the excitation system such that only the defined region of interest of the target region is excited or (b) controlling the detection system such that only signals from the defined region of interest of the target region are detected, and detecting and analyzingonly scattered radiation from the defined region of interest generated by the excitation beam. Marchitto et al. does not disclose defining a region of interest in an image of a target region. Additionally, Marchitto et al. does not disclose controlling the excitation system to excite only the region of interest and controlling the detection system to only detect scatter radiation from the defined region of interest of the target region.

Accordingly it is submitted that independent **claim 11** and **claims 12-14** dependent therefrom distinguish patentable over the references of record.

Claim 15 calls for a control unit which controls at least one of: the optical system to move the excitation beam such that the radiation beam excites only the

defined region of interest of the target region and controls the detection unit to spectrally analyze only the inelastically scattered radiation from the defined region of interest. Marchitto et al. does not disclose a control system which excites only a region of interest of a target region that is defined from an image generated by a monitoring system. Additionally, Marchitto et al. does not disclose a control system that controls the detection unit to spectrally analyze only the inelastically scattered radiation from the region of interest that is defined from an image generated by a monitoring system.

Accordingly it is submitted that independent **claim 15** and **claim 16-18** dependent therefrom distinguish patentable over the references of record.

CONCLUSION

For the reasons set forth above, it is submitted that **claims 1-18** (all claims) distinguish patentably over the references of record and meet all statutory requirements. An early allowance of all claims is requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case(s), he is requested to telephone Thomas Kocovsky at 216.363.9000.

Respectfully submitted,

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